

## {In Archive} Re: Salmonids Modeling Other comments . Summary

David Olszyk to: Thomas Fontaine

04/26/2011 03:53 PM

Cc: Nathan Schumaker

Archive: This message is being viewed in an archive.

Hi Tom,

I have looked over what Nathan sent this afternoon. People from EFED were going to be at the CSS meeting and it sounds like some productive interactions will come out of it. We have a lot in common with EFED's interests and think we have had contacts in the past and will expand on those in the future. He is a summary to address items of March 18 in a more complete way. I am not sure how you want to say this, We regret not having closer communications regarding the issues Tom Brady brought up and we will be working more closely with EFED in the future. We have continually discuss issues concerning herbicides with the EFED Plant Tech team and had worked in the past with EFED concerning HexSim. In addition, we could do a lot more work with OPP in the future if that is what comes out of the CSS meeting. Please feel free to edit this as you wish before responding to him.

Thanks, Dave

Here are details concerning the projects Tom Brady mentioned.

1. In terms of the two new IPM-related projects, Montira Pongsiri of the Office of the Science Advisor is the lead, and she was in contact with OPP's Biopesticides and Pollution Prevention Division because of the IPM focus of those projects. However, we invited EFED to the kick-off meetings for the two projects, and will be working closely with you as those projects develop. The projects are:

One project with the University of Washington concerns use of the HexSim population model to evaluate the response of San Joaquin Kit Fox to rodenticides and climate change. Ed Odenkirchen and Brian Anderson discussed EFED's interests concerning that project at the kick-off meeting. They will be involved with it in routine basis and will be invited to a major meeting on the project scheduled for this fall in the San Joaquin Valley.

The other project with Oregon State University is to develop and utilize ecosystem-based models (Envision and others) that could inform IPM strategies under changing climatic conditions. I think Andrew Shelby, Ed Odenkirchen and possibly Rochelle Bohaty were on the line for EFED during the kick-off meeting. They will also be involved with this project on a routine basis, and we are making plans to include EFED in Webinars on the use of the PRISM model and the PRIME risk assessment model to be used by OSU.

- 2. In terms of a spatially explicit population modelling project with the NMFS, that was not WED's work. NMFS paid to develop a proof of concept aquatic sub-model for HexSim through the University of Washington, not EPA. However, we can put you in contact with people working on that model. Right now we are not actively pursing this "aquatic HexSim" (though that could be done). Instead, we are focusing on the "SMURF" fish population model which is being developed by a scientist from NERL-Athens GA in addition to scientists from WED. That group has been in contact with Kris Garber from EFED in terms of the potential use of the SMURF model to look at pesticides effects on fish.
- 3. We have not been involved in any project using Atrazine and the California Red-Legged frog as a test case for development of a population model for amphibians. However, HexSim was designed to work with amphibians and herps, in addition to birds and mammals. Just today Nathan Schumaker, while at ORD's Chemical Safety for Sustainability Research Program planning meeting, met with Keith Sappington from EFED about developing a case study that uses HexSim to scale risk assessment up to populations and landscapes, and with a scientist from NERL / Cincinnati who would potentially like to work on an amphibian simulation.

4. Another area we have been involved in regarding endangered species and population modeling, Nathan Schumaker has been involved with other federal agencies in terms of use of HexSim to model spotted-owl populations for the recovery plan.

We realize these are all important topics in terms of EFED and will be working with you at different levels to make sure we work with you closely as these projects develop. We would be happy to set up a briefing with you to go over these projects. If there are any OPP divisions besides EFED who should be involved please let us know. Ed Odenkirchen mentioned the Biological and Economic Analysis Division, but if there are others please let us know.

Nathan Schumaker Hi Dave & Tom, EFED has certainly been invol... 04/26/2011 01:04:05 PM

From: Nathan Schumaker/COR/USEPA/US
To: David Olszyk/COR/USEPA/US@EPA
Cc: Thomas Fontaine/COR/USEPA/US@EPA

Date: 04/26/2011 01:04 PM

Subject: Re: Salmonids Modeling Other comments

## Hi Dave & Tom,

EFED has certainly been involved in the kit fox planning from early on.

National Marine Fisheries paid to develop a proof of concept aquatic sub-model for HexSim. This was done through the University of Washington, not EPA. This is distinct from the development of the SMURF model. I believe that there is great potential to contribute to EPA by pursuing this "aquatic HexSim" work, but it is not being actively pursued since the seed money ran out (and Allen Brookes left the UW).

We are not now, and were not previously involved in any amphibian work with HexSim. However, HexSim was designed to work with amphibians and herps, in addition to birds and mammals. I just today met a fellow from NERL / Cincinnati (Eric Waits) who would potentially like to work with me to develop such a simulation. I've also talked today with Keith Sappington (OPP / EFED) about developing a case study that uses HexSim to scale risk assessment up to populations and landscapes. He was very interested.

I think that covers all of your questions.

Nathan

## ----- David Olszyk/COR/USEPA/US wrote: -----

To: Thomas Fontaine/COR/USEPA/US@EPA

From: David Olszyk/COR/USEPA/US

Date: 04/26/2011 12:43PM

Cc: Nathan Schumaker/COR/USEPA/US@EPA Subject: Salmonids Modeling Other comments

Tom and Nathan,

In terms of fish modeling, I think the fish modeling group is also in communication with Kris Garber of EFED in terms of seeing if the ORD (Athens and us) fish model can be of use to them in terms of modeling pesticide impacts on fish populations.

I think the bottom line is that we have been working with EFED staff, and can have additional briefings for others in OPP if desired on the three areas we area working on:

Coop with U. Washington on use of HexSim to model Kit Fox populations in response to

pesticides (rodenticides) and climate change

Coop with OSU on use of Envision to evaluate pesticide usage with different IPM scenarios and climate change

Fish model which can be adapted to look at pesticide effects

Anything else Nathan? Red Legged frog? Also mention use of HexSim by Fisheries and Wildlife to look at spotted owl populations?

Thanks. Dave

---- Forwarded by David Olszyk/COR/USEPA/US on 04/26/2011 12:37 PM -----

From: David Olszyk/COR/USEPA/US

To: Thomas Fontaine/COR/USEPA/US@EPA Cc: Nathan Schumaker/COR/USEPA/US@EPA

Date: 04/26/2011 12:35 PM

Subject: Re: Fw: Pesticide/ESA Related Projects - rapid response to me please!

Tom,

As far as I know Montira had involved OPP from the start, though I don't know which Division, she may have been involved more with Biopesticides and Pollution Prevention Division since they are involved with IPM activities. In any event, EFED was heavily involved with our kick off sessions for our two cooperative agreements last week (especially in terms of Ed Odenkirchen,'s participation and others), and we will be in close communication with them especially in terms of the Kit Fox project using HexSim in the San Joaquin Valley. We also will be in communication with them in terms of use of Envision to look at pesticide usage in two watersheds in the Willamette Valley.

Nathan, what can you say about the NMFS and a project using Atrazine and the California Red-Legged frog as a test case for development of a population model for amphibians?

Thanks, Dave

Thomas Fontaine---04/26/2011 12:19:53 PM---Dave and Nathan, read from the bottom up. I was under the distinct impressoin that Montira had invo

From: Thomas Fontaine/COR/USEPA/US

To: David Olszyk/COR/USEPA/US@EPA, Nathan Schumaker/COR/USEPA/US@EPA

Date: 04/26/2011 12:19 PM

Subject: Fw: Pesticide/ESA Related Projects - rapid response to me please!

Dave and Nathan, read from the bottom up. I was under the distinct impressoin that Montira had involved OPP from the start on the IPM projects.

Tell me what you can about the use of a spatially explicit population modelling project (using hexsim???) with NMFS and a project using Atrazine and the California Red-Legged frog as a test case for development of a population model for amphibians.

Thomas D. Fontaine, Ph.D.
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----- Forwarded by Thomas Fontaine/COR/USEPA/US on 04/26/2011 12:16 PM -----

From: Donald Brady/DC/USEPA/US

To: Thomas Fontaine/COR/USEPA/US@EPA

Date: 04/26/2011 11:43 AM

Subject: Re: Fw: Pesticide/ESA Related Projects

Tom,

The note I sent on March 18 is at the bottom of the note I sent today.

Thks, Don

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Don Brady, Director Environmental Fate and Effects Division Office of Pesticide Programs U. S. Environmental Protection Agency

Phone: 703-305-7695

Sent by EPA Wireless Email Services Thomas Fontaine

---- Original Message -----

From: Thomas Fontaine

**Sent:** 04/26/2011 11:32 AM PDT

To: Donald Brady

Subject: Re: Fw: Pesticide/ESA Related Projects

Don, this is the only note I have from you in my inbox. Our email system crashed Saturday - Monday, so it may have never made it here. Could you resend?

Thomas D. Fontaine, Ph.D.
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Donald Brady---04/26/2011 06:24:35 AM---Hi Tom, I was wondering if you had a chance to read my note. Steve Bradbury and I will be scheduli

From: Donald Brady/DC/USEPA/US

To: Thomas Fontaine/COR/USEPA/US@EPA

Date: 04/26/2011 06:24 AM

Subject: Fw: Pesticide/ESA Related Projects

Hi Tom,

I was wondering if you had a chance to read my note. Steve Bradbury and I will be scheduling a conference call with a number of ORD DDs to raise some of the same issues. Thks,

Don Brady

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Donald J. Brady, Ph. D., Director Environmental Fate and Effects Division (7507P) OPP, U.S. EPA 1200 Pennsylvania Ave, NW Washington, DC 20460 703-305-7695

---- Forwarded by Donald Brady/DC/USEPA/US on 04/26/2011 08:57 AM -----

From: Donald Brady/DC/USEPA/US

To: Thomas Fontaine/COR/USEPA/US@EPA

Date: 03/18/2011 05:36 PM

Subject: Pesticide/ESA Related Projects

Hi Tom,

I think you and I met somewhere along the way when I worked in the water office. At any rate, I have

moved to the pesticides office and would like to check with you on projects that we have recently become aware of that I think are being conducted in WED in Corvalis.

One is an email from Monica Pongsiri describing a project with David Olszyk to investigate the effects of rodenticides and other pest management programs on the San Joaquin Kitfox which is listed under the ESA. EFED staff scientists were requested to comment after the project was awarded. As you may know, this species is one of our current litigation species. In addition, rodenticides are an important issue for us in OPP and we have an ongoing consultation now.

We also have also heard that ORD is involved a spatially explicit population modelling project with NMFS. As you probably know, one of our major comments on the recent salmonid biops is the lack of transparency in the population modeling that NMFS did to support jeopardy findings. I also think we might be able to offer perspectives that would enhance the utility of such models for use by OPP and other parts of EPA.

I have also become aware of a project using Atrazine and the California Red-Legged frog as a test case for development of a population model for amphibians.

These are all sensitive topics to us, there is active litigation and involvement at the highest levels in OPP, OW, NMFS/NOAA, FWS and the Department of Agriculture. As far as I can see, these projects all began without any consultation, discussion or even notifice to OPP. This concerns me because I think we have perspectives to offer on these and similar ideas which I believe are best offered at the project formulation stage and becasue of the high visibility of these topics.

I would like to set up a discussion in which OPP is briefed on projects related to ESA, population modeling and atrazine. Its important that we know about ongoing projects. I also think it would be a good idea to figure out, whether as part of the ORD planning process, or just through us communicating, about perspective projects so we can offer our perspective before the project is funded. I will be traveling early part of next week but will try to call you when I return.

Thanks, Don Brady

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Donald J. Brady, Ph. D., Director Environmental Fate and Effects Division (7507P) OPP, U.S. EPA 1200 Pennsylvania Ave, NW Washington, DC 20460 703-305-7695